


1995

Part-time Courses 1995-96

City of Dublin Vocational Education Committee

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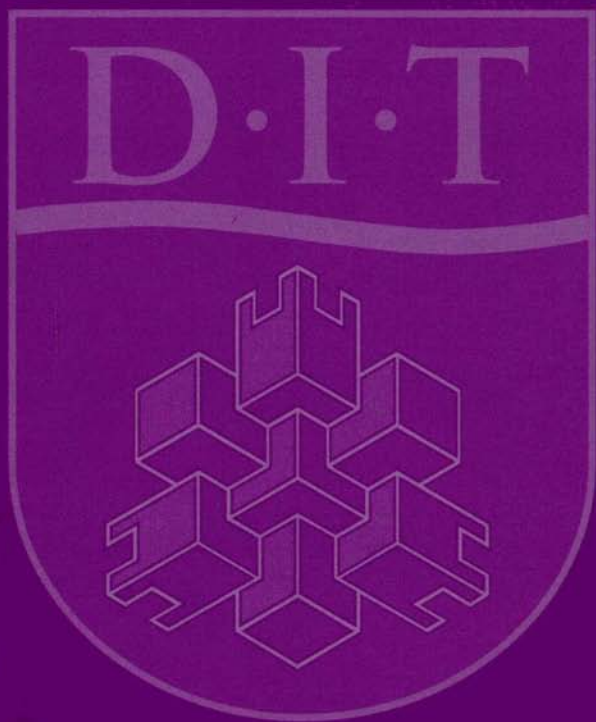
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DUBLIN INSTITUTE
of TECHNOLOGY

Institiúid Teicneolaíochta Bhaile Átha Cliath

PART-TIME COURSES 95-96



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CALENDAR

FOREWORD

I was very pleased to launch a new DIT initiative last year involving the production of a co-ordinated series of booklets that provide information about the part-time and apprenticeship courses which may be offered by the Institute in its different centres in the 1995/96 session. Since the establishment of the first of our Colleges in Kevin Street in 1887 there has been a special commitment to part-time education, and over the years many thousands of young people (and the not so young!) have benefitted from the wide range of courses that have been developed. Today some 13,000 part-time and apprentice students are enrolled in the Colleges of the Institute, which is by far the largest provision being made in this area by any Irish higher education institution.

As part of the process of implementing the Dublin Institute of Technology Act 1992, DIT will be involved in a reorganisation, leading to an overall integrated structure, which hopefully will enable it to offer a wider range of courses and provide a better service to our students. It seems likely that most of the disciplines will continue to be based in their present sites, at least for the time being, with one major exception - the activities of the former College of Commerce in Rathmines were transferred to a new purpose built 10,000 square metre college in Aungier Street in September 1994.

We are very aware of the rapid pace of technological change and the need for people to keep abreast of new developments or prepare for new career directions. We hope that you will find a course that is of interest to you in DIT. If not, you might contact the College Department associated with the broad discipline area and make them aware of your area of interest or needs. We are anxious to respond as comprehensively as possible to demands, having regard to available resources, and many of our present courses were developed in response to such expressions of interest. Enquiries from employers, professional bodies and other groups are also welcome in this context.

If you do decide to pursue a part-time or apprenticeship course in DIT we hope that you will both enjoy and benefit from your time with us.

Dr. Brendan Goldsmith.
President.

INTRODUCTION

The College has a strong commitment to providing a wide range of part-time day and/or evening courses relating to its main specialisations in Construction, Engineering and Printing disciplines and associated areas. The aim of these courses is to provide both young people, and the not so young, with opportunities to achieve worthwhile qualifications and to enhance and broaden their existing qualifications base.

METHOD OF APPLICATION AND ENROLMENT

Application and admission to part-time day and evening courses is by personal attendance for interview at the College between 6.30 p.m. and 8.00 p.m. in accordance with the following schedule.

Monday,

11th September: Enrolment for all part-time and evening courses provided by the College except courses in:
and Tuesday
12th September Printing, Automobile and Aeronautical Engineering.

Wednesday,

13th September: Enrolment for courses in Printing, Automobile and Aeronautical Engineering.
and

Thursday,

14th September Enrolment for all other part-time day and evening courses in which vacancies remain.

Prior application or contact with the College is not necessary. Candidates are encouraged to bring with them evidence of existing qualifications and employment together with the specified tuition fee to enable them to complete the enrolment if they are acceptable and permitted to do so. Classes are generally scheduled to commence during the week commencing September 25th and those who have enrolled will be expected to report for classes in accordance with the schedule which will be available.

B702

**CONSTRUCTION TECHNOLOGY CERTIFICATE/
DIPLOMA PART-TIME**

This day release course is similar to the wholetime Construction Technology Certificate/Diploma course (DT114) and leads to the award of the Construction Technology Certificate/Diploma. Classes are scheduled on one day and two evenings per week over a period of four years. Entry to this course is open to those holding:

- (a) The secondary schools Leaving Certificate in at least five subjects including Mathematics and English or an equivalent qualification.
- (b) Appropriate employment in the Construction Industry.

Course fee

<i>First & Second Years</i>	£330
<i>Subsequent Years</i>	£230

Department in Charge: Surveying and Building Technology.

B704

**DIPLOMA/DEGREE IN CONSTRUCTION ECONOMICS
PART-TIME**

This day release course is similar to the corresponding wholetime course (FT02) and leads to the award of a Diploma/Degree in Construction Economics. Classes are scheduled on one day and two evenings per week over a period of six years. The academic entry qualifications to the First Year of the course are similar to those for FT110. Candidates holding relevant technician qualifications at an appropriate level may be eligible for exemptions from one or more years of the course. Candidates must be in appropriate employment in the Construction Industry.

Course fee

Years One to Five	£640
Year Six	£660

Department in Charge: Surveying & Building Technology.

B703

**PROFESSIONAL COURSE IN SURVEYING AND
CONSTRUCTION STUDIES**

This evening course assists students who hold Intermediate Level qualifications in the construction and surveying fields, in progressing to full professional qualifications of appropriate institutions. Students may attend classes up to two evenings per week depending on their choice of subjects.

Entry
Qualifications

Diploma in Construction Studies, C.T.D., Member 1
Examination of C.I.O.B. or R.I.C.S., Part 1 examinations.

Course fee

£330

Department in Charge: Surveying and Building Technology.

B705

GRADUATE DIPLOMA IN ARBITRATION LAW

The objectives of this one year part-time course are to provide participants with a better knowledge of the law and arbitration including the Arbitration Acts of 1954 and 1980. It has been developed at the request of and in co-operation with the Irish Branch of the Chartered Institute of Arbitrators. Normally this course runs on alternate years. It is expected that it will be provided in 1995/96.

Entrance
Requirements

Relevant professional qualification (e.g. Law, Engineering Architecture, Surveying, Accountancy, Insurance etc.) with exemptions from modules (a) and (b) for practising lawyers and those with a recognised law degree. Exceptionally, applications will be accepted from unqualified students who have appropriate training or experience. Selection will be subject to interview. Exempted students will be deemed to enrol in course B705A.

Course of Study

The course comprises three taught modules and two seminars.
The taught modules are:

- (a) Legal Principles, Civil Procedure & Evidence (b) Contract & Tort and (c) Arbitration Law & Procedure, Alternative Methods of Dispute Resolution. The two seminars which are organised by the Irish Branch of the Chartered Institute of Arbitrators deal with:
- (i) Introduction to Arbitration and
- (ii) ADR and Award Writing.

They are subject to a separate fee payable to the Irish Branch of the Institute.



Examinations & Awards

On successful completion of course students will be awarded the Dublin Institute of Technology Graduate Diploma in Arbitration Law. Depending on their results students may be exempted from Parts I and II of the examinations of the Chartered Institute of Arbitrators

Course fee

B705	£900
B705A	£550

Department in Charge: Surveying & Building Technology

B706

GRADUATE DIPLOMA IN INTERNATIONAL ARBITRATION LAW

The objectives of this one year part-time course are to provide a better knowledge of the practice of international arbitration law and procedures. It has been developed at the request of and in co-operation with the Irish Branch of the Chartered Institute of Arbitrators and will next be offered in the 1996/97 session.

Entrance Requirements

Application will be open to those holding the DIT Diploma in Arbitration Law, Fellows of the Chartered Institute of Arbitrators and those who have passed Parts I and II of the examinations of that Institute. Selection will be subject to interview.

Course of Study

The course comprises two taught modules and four special seminars. The taught modules are:

- (a) Comparative Law & Procedure; (b) International Arbitration, Practice & Procedure. The special intensive two day seminars are led and directed by visiting specialist lecturers and are organised by the Irish branch of the Chartered Institute of Arbitrators.

Examinations & Awards

On successful completion of the course students will be awarded the Dublin Institute of Technology Graduate Diploma in International Arbitration Law.

Course fee

£600

Department in Charge: Surveying & Building Technology.



B707

GRADUATE DIPLOMA IN PLANNING AND DEVELOPMENT ECONOMICS

The objective of this part-time post-graduate course, which extends over two academic years, is to meet the educational requirements for practice as a Planning and Development Surveyor. The first year of this course will next be offered in the 1996/97 session.

Entrance Requirements

- (1) (a) a recognised professional qualification in the fields of Planning, Architecture, Surveying, Engineering, Law, Accountancy
or
(b) an Honours Degree in an appropriate discipline viz. Surveying, Economics, Law, Geography, Business Studies.
and
- (2) Employment in, or evidence of appropriate post-certification work experience in the Built Environment field.

Course of Study

The course consists of two parts:

Part I subjects are Valuations, Law, Urban Land Economics, Taxation and Rating, Building Technology and Management, and Principles and Techniques of Planning.

Part II consists of one integrated subject area containing a number of elements under the general title 'Planning and Development Policies. Practice and Procedures'.

Examinations & Awards

Part I examinations in the subjects listed above will be held at the end of Year 1. Part II examinations will be held and a major planning and development case study presented at the end of Year 2.

On successful completion of the course, students are expected to qualify for the award of a Dublin Institute of Technology Graduate Diploma in Land Use Economics. Exemption will be sought for holders of this Diploma from the Part II and III examinations of the Planning and Development Division of the Royal Institution of Chartered Surveyors.

Course fee

£850

Department in Charge: Surveying & Building Technology.

SHORT COURSES

Short Courses in aspects of Building, Project Management and Computer Applications may be held during the session. Enquiries relating to these will be welcomed by the Department of Surveying and Building Technology.

Department in Charge Surveying and Building Technology.

B740

FOUNDATION COURSE FOR DEGREE IN ENGINEERING

The Department of Engineering Technology may again offer the Foundation Course to a Diploma/Degree in Engineering on a part-time basis as it did in the 1994/95 session. It is open to those who already hold an appropriate Technician Diploma qualification at Distinction level.

This Foundation Course is intended for applicants who possess a Technician Diploma at Merit or Pass levels.

Following successful completion of this Foundation Course students may pursue a further three years on a Part-time basis with the object of achieving the qualifications of Diploma/Degree in Engineering. See course B742 below.

Course fee

£330

Department in Charge: Engineering Technology

B741

PROFESSIONAL ENGINEERING BODIES COURSE

This is a day and/or evening course to prepare students for the Part II examinations of Professional Engineering Bodies including:-

- (i) Institution of Engineers of Ireland.
- (ii) The Engineering Council (UK) and its associated Professional Bodies such as:-

- (a) The Institution of Mechanical Engineers;
- (b) The Institution of Electrical Engineers;
- (c) The Institution of Structural Engineers;
- (d) Chartered Institute of Building Services Engineers.

Courses are offered for subjects in the Part II stage provided there are sufficient applicants of a suitable educational standard.

Depending on demand, the following Part II subjects may be offered: The Engineer in Society, Mechanics of Solids, Materials, Structural Analysis, Structural Design, Thermodynamics, Fuel and Energy, Geotechnical Engineering and possibly other subjects. Students are required to complete a Laboratory Programme as part of this course.

Details of the syllabus and examination regulations are available from the Institution of Engineers of Ireland, 22 Clyde Road, Dublin 4.

Entrance
Requirements

Before entry, applicants must meet the requirements of the appropriate institution for student membership. They are urged to make early applications to the Institutions because it may take several months to process and it is not possible to sit the examinations until this has been completed.

The requirement for student membership of the Institute of Engineers of Ireland is Leaving Certificate with Honours or GCE Advanced Level in Mathematics and a suitable Science subject together with four Ordinary Level subjects including English.

Certain Technician qualifications also meet the educational requirements for student membership and may give exemption from all or some subjects in Part I. Details are available from the Department of Engineering Technology

Course fee

£330

Department in Charge: Engineering Technology



B742

PART-TIME DIPLOMA/DEGREE COURSE IN ENGINEERING:

This course will commence in September, 1995. Applications are invited from those who have successfully completed the Foundation Course in Engineering (B740) or those who hold an appropriate Technician Diploma at Distinction level. Depending on demand different options may be available.

Course Duration

Three years part-time

Course Fee

£640 (Examination fees included)

Further information available from:

Mr Oliver McNulty

Head, Department of Engineering Technology

Tel: 402 3637.

B743

CIVIL ENGINEERING TECHNICIAN CERTIFICATE AND DIPLOMA COURSE

This part-time day and/or evening course prepares students for a Technician Certificate/Diploma in Mechanical Engineering. Students are expected to be already suitably employed in Mechanical Engineering before commencing the course. It parallels the corresponding wholetime course DT 126 and follows the same core syllabus.

Entrance Requirements

Leaving Certificate or equivalent with passes in Mathematics, a Science subject (preferably Physics), English, and two other subjects or a Senior Trade Certificate with suitable endorsement subjects.

Course of Study

Stage I - Mathematics; Engineering Science; Mechanics; Drawing; Complementary Studies; Building Technology and Engineering Materials; Surveying; Computing.

Stage II - Mathematics; Complementary Studies; Concrete; Geology and Soil Mechanics; Construction Services and Supplies; Planning and Administration; Structural Design and Detailing; Surveying;



Stage 111-Fifth and Sixth Years (Diploma Stage) This stage offers options in Municipal, Structural and Environmental Engineering. Candidates are expected to be employed and gaining suitable experience in the appropriate field and are required to have passed the Certificate Stage with merit, or have one year's suitable experience together with a Pass Certificate.

Municipal Option: Mathematics, Road Engineering, Management Studies, Planning and Building Regulations, Hydraulics and Sanitary Services, Structural Design and a Project.

Structural Option: Mathematics, Management Studies, Theory of Structures, Structural Design (Concrete), Structural Design (Steel), Municipal Engineering and a Project.

Environmental Option: Mathematics, Management Studies, Road Engineering, Sanitary Services, Waste Management, Environmental Impact Assessment, Environmental Studies (Environmental Economics, Ecology, Air and Water Pollution), Environmental Law and Planning and Building Regulations and a Project.

A number of subjects in the various options are taken in common, particularly in the fifth year.

The Environmental Option will commence in the academic year 1995/96.

Examinations and Other Requirements

At the end of each session students take a Dublin Institute of Technology examination.

Recognition by Professional Bodies

Those who have successfully completed the Certificate Stage of the course meet the academic requirements for Technician status with the Institution of Engineers of Ireland, while those who have completed the Diploma stage meet the Technician Engineer level and can qualify for the non-Corporate Associateship grade of Membership after they have completed a suitable period of practical training.

Course fee

Stage I £330

Stage II & III £230

Department in Charge: Engineering Technology



B744

BUILDING SERVICES ENGINEERING TECHNICIAN CERTIFICATE AND DIPLOMA COURSE

This part-time day and or evening course prepares students for a Technician Certificate/Diploma in Building Services Engineering. Students are expected to be already suitably employed in Building Services Engineering before commencing the course. It parallels the corresponding wholetime Course DT127 and follows the same core syllabus.

Entrance
Requirements

Leaving Certificate or equivalent with passes in Mathematics, a Science subject (preferably Physics) and two other subjects or a Senior Trade Certificate with suitable endorsement subjects.

Course of Study

Stage I - First and Second Years - Subjects: Mathematics, Mechanics, Engineering Science, Drawing, Instrumentation and Materials, Building Construction and Services, Complementary Studies and Computing.

Stage II - Third and Fourth Years (Certificate Stage): At this stage two options are available, Building Services and Refrigeration Technology.

Common Subjects: Mathematics, Thermal and Fluid Plant, Electrotechnology and Industrial Instrumentation, Complementary Studies and Computing.

Building Services Option: Environmental Engineering, Environmental Plant Design, Lighting, Acoustics and Water Services.

Refrigeration Technology Option: Refrigeration Plant, Refrigeration Design, Lighting, Acoustics and Water Services.

Stage III - Fifth and Sixth Years (Diploma Stage): Mathematics, Management Studies, Electrotechnology and Controls, Lighting and Acoustics, Environmental Engineering, Air Conditioning and Refrigeration, Heating and Combustion, Computing and a Project.

A the end of each session students take a Dublin Institute of Technology Examination.

Examinations
and other
Requirements

Course fee

<i>Stage I</i>	£330
<i>Stage II & III</i>	£230

Department in Charge: Engineering Technology



B745

MECHANICAL ENGINEERING TECHNICIAN CERTIFICATE AND DIPLOMA COURSE

This part-time day and/or evening course prepares students for a Technician Certificate/Diploma in Mechanical Engineering. Students are expected to be already suitably employed in Mechanical Engineering before commencing the course. It parallels the corresponding wholetime course DT 128 and follows the same core syllabus.

Entrance
Requirements

Leaving Certificate or equivalent with passes in Mathematics, a Science subject (preferably Physics), English, and two other subjects or a Senior Trade Certificate with suitable endorsement subjects.

Course of Study

Stage I - First and Second Year—Subjects: Mathematics, Engineering Science, Mechanics, Drawing, Instrumentation and Materials, Workshop Technology, Complementary Studies and Computing.

Stage II - Third and Fourth Years (Certificate Stage): At this stage three options are offered: Mechanical, Welding and Fluid Power.

Common Subjects: Mathematics, Thermal and Fluid Plant, Electrotechnology and Industrial Instrumentation, Complementary Studies and Computing.

Mechanical Option: Mechanics, Design and Materials, Manufacturing Technology and Design (years work).

Welding Option: Design and Materials, Welding Technology, and Welding Inspection.

Fluid Power Option: Fluid Power 1, Fluid Power Systems, and Machine Controls.

Stage III - Fifth and Sixth Years (Diploma Stage): At this stage an Instrumentation Option is offered only on a part-time basis and candidates are expected to be employed in this field. Subjects: Mathematics, Management Studies, Electrotechnology and Electronics, Control Engineering, Industrial Instrumentation, Design, and Project Work together with either Mechanics and Manufacturing Design or Material Science and Process Plant Design and Management.



with together	Candidates are required to have passed the Certificate Stage Merit or to have at least one year's suitable experience with a Pass Certificate.	
Examinations and Other Requirements	At the end of each session students take a Dublin of Institute of Technology examination.	
Recognition by Professional Bodies	Those who have successfully completed the Certificate Stage of this course meet the academic requirements for Technician status with the Institution of Engineers of Ireland, while those who have completed the Diploma stage meet the Technician Engineer and can qualify for the non-Corporate Associateship grade of Membership after they have completed a suitable period of practical training.	
level		
Course fee	Stage I	£330
	Stage II & III	£230
Department in Charge: Engineering Technology.		

B747	MECHANICAL ENGINEERING TECHNICIAN COURSE	
	This evening course is intended to prepare students for the City & Guilds of London examinations for Mechanical Engineering Technicians (2550). The course is for technicians and draughtsmen engaged in the following types of employment:	
	Machine Tool Operation, Jig & Tool Design, Engineering Production and Design Draughtsmen.	
Entrance Requirements	Elementary Stage Technological Certificate of the Department of Education in Mechanical Engineering or Leaving Certificate or endorsement in Senior Craft Certificate or equivalent.	
Course of Study	First Year Workshop Processes and Practice, Engineering Drawing and Materials, Engineering Science, Mathematics, General Studies.	
Second Year	Science and Mathematics, Drawing and Materials, Production Technology and General Studies.	



Examinations and Other Requirements	At the end of the first year students take the Part I examination of the City & Guilds of London Institute No. 2550, Part 11 at the end of the second year, and Part 111 at the end of the third year.	
Course fee	<i>First & Second Years</i>	£330
	<i>Third Year</i>	£230
Department in Charge: Engineering Technology		

B748	CERTIFIED MANUFACTURING TECHNOLOGIST This course is designed to assist students to prepare for the Manufacturing Engineering Part 1 examination of the Society of Manufacturing Engineers. This leads to the award of Certified Manufacturing Technologist (CMfgT). The course is aimed at technicians, supervisors, production managers and engineers engaged in manufacturing.
Entrance Requirements	Candidates must have two or more years manufacturing third level engineering education experience and/or third level engineering education.
Course Content	A review of manufacturing engineering fundamentals including applied mechanics, materials, quality control, management, computer applications, automation, manufacturing processes and engineering design.
Duration:	One year, two evenings per week.
Course fee	£330
<i>Department in Charge: Engineering Technology</i>	

B757

INDUSTRIAL MANAGEMENT CERTIFICATE AND DIPLOMA COURSE

This is a two year evening Certificate course intended for engineering technicians and trainee production and industrial managers who wish to take the certificate examinations of the Institution of Industrial Managers. The Diploma stage (Third Year) is intended primarily for those responsible for discharging management functions.

Entrance
Requirements

Students entering the Certificate course should have reached the Leaving Certificate standard of general education and be suitably employed as managers or supervisors in industry. Applicants holding an appropriate degree or professional qualification and substantial management experience may be admitted directly into the Third Year or Diploma Stage.

Course of Study

First Year Subjects: Production and Operational Management, Industrial Environment, Industrial Management and Organisation, Microelectronics and Data Handling.

Second Year Subjects: Production and Operation Management, Industrial Finance, Personnel and Industrial Relations.

Third Year (Diploma Stage) Subjects: This involves a further one year period of study of Industrial Management Policy and Practice in which knowledge acquired during the Certificate course is applied to solve practical problems by an integrated approach using case studies, etc.

Examinations
and Other
Requirements

Students must pass a College examination at the end of each year. The examination is moderated by the Institution of Industrial Managers. Those who successfully complete the Certificate course qualify for Associate Membership of the Institution of Industrial Managers. Successful students may continue their studies on the one year Diploma course, which leads to Membership grade (MIIM).

Those who enrol are required to apply for student membership

Course fee

<i>First & Second Years</i>	£330
<i>Third Year</i>	£230

Department in Charge: Engineering Technology

B758

REFRIGERATION ENGINEERING TECHNICIAN

This is a two year course for technicians employed in the refrigeration engineering industry. Suitable students are prepared for the City & Guilds of London Institute examinations in the Science and Technology of Refrigeration (2570). The subjects of instruction are:- Science, Refrigeration Processes and Machinery, and Drawing.

Course fee

£330

Department in Charge: Engineering Technology.

B759

SHORT COURSE PROGRAMME

A series of 1-5 day short courses on modern developments in Engineering Technology may be organised at different stages during the session. These may include:

- (a) Low Cost Automation;
- (b) Fluid Power;
- (c) Maintenance Management Techniques;
- (d) CAD/CAM
- (e) New Developments in Welding Technology;
- (f) Fuel Technology;
- (g) Fire Safety;
- (h) Structural Design Codes;
- (j) New Materials;
- (k) Water Pollution Control;
- (l) Energy Conservation;
- (m) Engineering Costing and Estimating.

Department in Charge: Engineering Technology.

B761

MAINTENANCE TECHNOLOGY CERTIFICATE COURSE

This course will provide participants with a knowledge of maintenance strategies and skills to cope with the demands of modern maintenance requirements.

The course is organised on a modular basis and has considerable flexibility for craftspersons and other maintenance staff to enhance their qualifications.

Entrance Requirements

Leaving Certificate in five subjects including English and Mathematics, or appropriate Senior Trades Certificate with endorsements or equivalent qualifications or mature applicants. Participants should have at least three years experience performing plant maintenance duties.

Certification

Certification will be provided by the National Council for Educational Awards and the course is offered in the NCEA ACCS mode to allow participants to study for individual subjects, groups of subjects or the entire course programme.

Certification will be provided on a technology option basis. When the requisite technology option and core subjects have been satisfactorily completed the award of National Certificate in Technology, (Maintenance Technology) will be made.

Course of Study

The following technology options and core subjects are initially being offered subject to demand.

STAGE 1

Common Core Subjects

Mathematics, Computer Studies, Basic Technology, Maintenance Organisation, Technical Communication

Fluid Power Technology Option

Fluid Power Sciences,

Fluid Power Plant 1

Refrigeration & Air Conditioning Option

Basic Heat, Fundamentals of Refrigeration

STAGE 2

Common Core Subjects

Management of Maintenance

Computer Studies II

Fluid Power Technology Option

Fluid Power Science II

Fluid Power Plant II

Course fee

£330

Department in Charge: Engineering Technology

B770

Course Objective:

INTRODUCTORY PROGRAMMING

This is a one year evening course. Students are prepared for the City & Guilds of London Institute Examinations 726

Information Technology Program. Successful candidates will receive a City & Guilds Certificate in Programming (Level I)

- 7261-212 Introduction to Computers I

- 7261-200 Basic Programming I

- 7261-201 Cobol Programming I

Course of Study:

- Databases

- Computer Systems

- Spreadsheets

- Wordprocessing

- BASIC Language

- COBOL Language

Entrance Requirements:

Leaving Certificate or Equivalent

Timetable:

DAY	TIME	ROOM
Wednesday	6.30 - 9.30 p.m.	380
Monday	6.30 - 9.30 p.m.	380

Duration: -

One year, two evenings per week, Monday and Wednesday.

Course fee

£330

Department in Charge: Science, Mathematics & Computing

B771

COMPUTER PROGRAMMING

This is a one year evening course. Students are prepared for the City & Guilds of London Institute Examinations 726 Information Technology Program. Successful candidates of this course will receive a City & Guilds Diploma in Programming (Level 2).

- 7261-212 Introduction to Computers
- 7261-238 Program Design Techniques 2
- 7261-221 COBOL Programming 2
- 7261-224 C Programming 2

Course Objective

This course provides an extensive coverage of programming, with emphasis on C and COBOL languages. The principles of structured design and dataprocessing are covered.

Course of Study

- Introductory Computing
- Structured design
- COBOL
- C
- File/Data Processing

Entrance Requirements

- (a) Leaving Certificate or Equivalent
- (b) B70 Introductory Programming or relevant experience.

Duration

One Year, two evenings per week, Tuesday and Thursday

Course fee

£330

Department in Charge: Science, Mathematics & Computing

B772

ADVANCED PROGRAMMING

This is a one year evening course. Students are prepared for the City & Guilds of London Institute Examination 425 'Applicants Programming Certificate'.

Course Objectives

This is an advanced applications programming course enabling the student to design and develop commercial systems using advanced programming and design techniques. This course prepares students for work as a junior programmer.

Course of Study

- Program Design
- Structured Programming
- Problem Solving
- Design & Specification Tools
- Fourth Generation Languages
- Databases
- Program Documentation

Entrance Requirements

- (a) Leaving Certificate or equivalent
- (b) City & Guilds Preliminary Certificate in Applications Programming or equivalent

Course fee

£330

Department in Charge: Science, Mathematics & Computing

B781

AUTOCAD

This is a one year evening course. Students are prepared for the City & Guilds of London Institute Examination 4351 -01 'Computer-aided Draughting and Design using AutoCAD'.

Course Objectives

To give a broad knowledge of the fundamentals of computer aided design using AutoCad, and to allow the successful student to work in a CAD orientated design environment.

Course of Study

System requirements and configuration, drawing set-up and drawing aids, operational efficiency, drawing and editing, dimensioning and cross hatching, drawing display and plotting.

Entrance Requirements

- (a) Leaving Certificate or Equivalent.
- (b) Reference

Duration

One Year, one evening per week - Monday

Course fee

£330

Department in Charge: Science, Mathematics & Computing

B782**AUTOCAD - THREE DIMENSIONAL**

This is a one year evening course. Students are prepared for the City & Guilds of London Institute Course 4353-03 "Three Dimensional Design using AutoCad"

Course Objectives

To give a thorough knowledge of the important aspects of Computer Aided Design particularly as it relates to three dimensional applications. To enable the successful student to work in a modern technological environment.

Course of Study

Three dimensional co-ordinate systems, linear and surface entities in 3D, world and alternatives construction planes, presentation of models using parallel and perspective projection, plotting of single and multiple views.

Entrance Requirements:

(a) Leaving Certificate or Equivalent.
(b) City & Guilds 4351 -01 "Computer Aided Design using AutoCad" or Equivalent.

Duration:

One year, one evening per week, (Thursday)

Course Fee

£330

B783**AUTOCAD CUSTOMISATION AND SYSTEM MANAGEMENT**

This is a one year evening course. Students are prepared for the City & Guilds of London Institute Course 4351-04 'AutoCAD Customisation and System Management'.

Course Objectives

To give a thorough knowledge of the important aspects of Computer Aided Design and associated technologies particularly in relation to their customisation and management. To enable the successful student to work in a modern technological environment.

Course of Study

Make and use slides, script files, linetypes and hatch patterns, define, edit and extract attributes, create customised menus and help files, make and use DXF and IGES files, load and execute LISP and ADS files, use and configure the AutoCAD and MS-DOS operating environments.

Entrance Requirements

(a) Leaving Certificate or Equivalent
(b) City & Guilds 4351-01 Computer Aided Design using AutoCAD' or equivalent.

Duration

One year, one evening per week (Wednesday)

Course fee:

£330

Department in Charge: Science, Mathematics & Computing

B791**WORDPROCESSING & DESK TOP PUBLISHING**

This is a one year evening course. Students are prepared for the City & Guilds of London Institute Examinations from the 726 Information Technology Program. Successful candidates of this course and one of B792, B781 and B782 courses will receive a City & Guilds Diploma in Computer Applications (Level 2).

- 7261-420 Word Processing 2
- 7261-427 Desktop Publishing 2

Course Objectives

The successful candidate will have competency in the use of wordprocessing and DTP systems.

Course of Study

- Wordprocessing
- Desktop publishing
- Documents Preparation
- Computer Hardware
- Computer Software

Entrance Requirements

Leaving Certificate or Equivalent.

Course fee

£230

Department in Charge: Science, Mathematics & Computing

B792**DATABASES & SPREADSHEETS**

This is a one year evening course. Students are prepared for the City & Guilds of London Institute Examinations from the 726 Information Technology Program. Successful candidate B791, B781 and B782 courses will receive a City & Guilds Diploma in Computer Applications (Level 2).

- 7261-421 Databases 2
- 7261-422 Spreadsheets 2

Course Objectives

The successful candidate will have competency in the use of spreadsheet and database systems.



Course of Study

- Databases
- Spreadsheets
- Data Management
- Computer Hardware
- Computer Software

Entrance
Requirements

Leaving Certificate or Equivalent

Course fee

£230

Department in Charge: Science, Mathematics & Computing



CRAFT & TRADE RELATED COURSES

Enquirers seeking further information about craft and trade related courses should contact Departments as follows:

Construction Trades 'A' B102, B104, B106, B108

Construction Trades 'B' B111, B112, B113, B114, B115, B117, B118, B119, B120.

Metal Fabrication & Plumbing B121, B122, B123, B124, B125, B126, B127, B128, B129, B130, B131, B132, B133, B134, B135, B136, B137

Engineering Trades B138, B139, B140, B142, B143, B144, B145, B146, B147, B148.

Transport Engineering B150, B151, B152, B153, B154, B155, B163, B164, B165, B170, B171, B172, B173, B174, B175, B176, B177, B178, B179.

Printing and Graphic Communications B180, B182, B183, B184, B185, B186, B187, B188, B189, B191, B192, B193, B197, B199.

B102

DECORATIVE PLASTERWORK

The course is designed to provide the participants with the necessary knowledge and skills to produce and fix decorative plasterwork to various dimensions and designs.

Course Content

Squeeze making; Profile preparation and production; Running moulds; Casting and fixing cornices; Designing and casting centre pieces; Rubber mould production; In-situ cornices; Repairs to existing plasterwork.

Entrance
Requirements

Knowledge of Plastering and Construction

Course Duration

30 weeks at 3 hours per week

**B104****VISUAL DESIGN IN BUILDING WORK**

This course is designed to give craftspersons an opportunity to study colour, texture and pattern and broken colour work in Building.

Duration	One year-30 weeks at 5 hours per week
Course Content	The effects of colour, light, pattern and texture on architectural form and character.
Entry Requirements	Senior Trade Certificate of the Department of Education in an appropriate trade or an equivalent qualification.
Award	City and Guilds of London Institute Certificate 6000-1-09 and 6000-1-5
Course fee	£330

B106**SIGNWORK—ADVANCED (PARTS 1 & 2)**

This course is intended to give painting and decorating craftspersons an opportunity to improve their knowledge and skill in the preparation of signwork.

Duration	One year - 30 weeks at 5 hours per week - Part 1. One year - 30 weeks at 5 hours per week—Part 2.
Course Content	Design, shape and form in signwork. Production of signs, Glass Gilding and Etching, Ornamental Gilding, Silk Screening.
Course fee	£230

B108**BUILDING MAINTENANCE MANAGEMENT (MODULAR)**

The course is designed to prepare students for corporate membership of the Institute of Maintenance and Building Management and to equip them with additional skills for employment and career development.

Entrance Requirement	(a) Employment in the Construction/Maintenance Industry (b) Interview
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**Course of Study**

This is a part-time modular course which offers programmes at Certificate and Diploma level. The purpose of the Certificate Programme is to re-introduce students to a course of study at a level which meets their needs and to provide a pre-entry qualification for the Diploma programme.

Certificate Programme

Modules include Corrective and Preventative Maintenance, Preparation of Estimates, Communication Techniques, Health, Safety and Welfare at Work, Law of Contract.

Diploma Programme

Modules include Maintenance of Buildings, Planning and Management, Personnel and Industrial Relations, Finance and Costings, Legal and Contractual Responsibilities, Marketing and Sales, Improved Methods of Materials Support.

Services

Classes are held in the evening from 6 - 9 pm and average 36 hours per module. A Continuing Professional Development (CPD) Certificate will be awarded to students who successfully complete individual modules.

Course fee

£140 per module - Certificate Programme
£230 per module - Diploma Programme

B111**CABINETMAKING/CHAIRMAKING**

This course is designed to assist students in preparing for the Senior Trade Certificate Examination of the Department of Education and the Advanced Certificates of the City & Guilds of London Institute.

Duration

One year, two evenings per week.

Subjects

Practical, Trade Theory & Drawing.

Entry Requirements

Prospective students must have completed 3 years of apprenticeship and hold the Department of Education Junior Trade Certificate.

Course fee

£330

**B117****WOODTURNING**

This course is of 10 weeks duration and covers the basics of woodturning. Students attend classes one evening per week

Course fee £100

B118**TIMBER TECHNOLOGY (INSTITUTE OF WOOD SCIENCE-CERTIFICATE COURSE)**

The aim of the Institute of Wood Science is to advance and encourage the scientific, technical, practical and general knowledge of timber and wood based materials.

This course of study is designed to satisfy that aim, providing a focused training programme for those involved with either the growth, utilisation, sale or treatment of timber and timber products.

Course outline The course prepares participants for the Institute of Wood Science Certificate level examination, is modular in design and comprises five modules:

- Module 1 Wood as a Material
- Module 2 Timber Trading
- Module 3 Drying and Strength
- Module 4 Conversion and Preservation
- Module 5 Panel Products and Utilisation

Duration The course will be delivered on two evenings per week and will run for 26 weeks.

Entry Requirements Mature students will be accepted on the basis of relevant experience and/or interview. New school leavers will be accepted provided they hold a minimum of grade B in a relevant subject in the Intermediate/Junior Certificate and will be subject to interview. They are, however, encouraged to gain 12 months trade experience before application.

Qualification Successful participants are rewarded with an internationally recognised professional qualification in timber technology, membership of the Institute of Wood Science at certificate level, and may use the letters CM IWSc.

Course fee £330

**B119****BUILDING TECHNOLOGY**

This is a three year evening course in Building Construction and associated subjects in preparation for the Department of Education technological examinations.

Duration 3 years - 3 evenings per week.

Objectives Elementary level examination at the end of the first year.
Intermediate level examination at the end of the second year.
Advanced level examination at the end of the third year.

Entry Requirements Employment in the Construction Industry and possession of a Junior Certificate with a Grade C in Mathematics and Mechanical Drawing, or better.

Exemption from First Year of the Course may be granted to an applicant who has achieved an acceptable level in Drawing and Building Subjects. Success in the Elementary Stage Examination is a requirement for entry into the Second Year of the Course.

Success in the Intermediate Stage Examination is a requirement for entry into the Final Year of the Course.

Subjects

1st Year

Building Construction, Mathematics and Geometry.

2nd Year

Building Construction, Builders Quantities, Land Surveying and Setting-out, Plane and Solid Geometry.

3rd Year

Building Construction, Builders Quantities, Plane and Solid Geometry.

Course fee *First and Second Years* £330
Third Year £230

B120

CRAFT TECHNICIAN CERTIFICATE COURSE IN BUILDING

This is a three-year part-time course. The course has been designed to enable students on completion of their craft studies to further their career prospects in the Building Industry.

Entry
Requirements

Prospective students must have completed at least three years as an apprentice in a recognised building trade and hold a Department of Education Senior Trade Certificate or equivalent trade qualifications.

Course of Study

Stage I:

Building Construction 1, Building Measurement, Estimating and Costing, Site Supervision and Building Science.

Stage II:

Building Construction II, Building Quantities and Account Procedures, Surveying & Levelling, Structural Engineering, Site Management and Building Materials.

Stage III:

Building Construction III, Building Quantities, Site Surveying and Setting-out, Building Services, Building Management, Safety Legislation, Elements of Building Law and Human Resource Management.

Award

Craft Based Technician Certificate in Building
(Dublin Institute of Technology)

Course fee

First and Second Years
Third Year

£330
£230

B113

CARPENTRY AND JOINERY-ADVANCED

This course is designed to assist senior apprentices and craftspersons to prepare for the Senior Trade Certificate Examination of the Department of Education and the Advanced Certificate of the City & Guilds of London Institute.

Duration

One year, two evenings per week.

Subjects

Trade Theory, Trade Practice & Drawing.

Entry
Requirements

Prospective students must have passed the Junior Trade Certificate Examination in Carpentry and Joinery.

Course fee

£330

B114

WOODCUTTING MACHINISTS

This course is designed to give students an appreciation of the practical use of woodcutting machines to Junior Trade Certificate standard of the Department of Education. Prospective students must be employed in a timber related trade. The course duration is two evenings per week over one year.

Course fee

£330

B115

WOOD CUTTING MACHINISTS - CNC

This course is designed to update the skills of Woodcutting Machinists in modern machining techniques including the use of a Computer based Numerically Controlled Router.

Course fee

£100 for 10 weeks

B112

WOOD CARVING

Covering the basic skills of wood carving, this course is of ten weeks duration

Course fee

£100

B121**METAL ARC AND OXY-ACETYLENE WELDING**

This course is designed to meet the needs of craftspersons and senior apprentices employed in the engineering and allied industries. The course covers manual metal arc and oxy-acetylene welding to EN287 and BS4872 standards on low-carbon steel plates and pipes.

Entrance Requirements:	Employed in one of the engineering or allied trades.
Duration:	One evening per week (7.00pm to 10.00pm) from September to Easter.
Course of Study	Practical manual metal arc and oxy-acetylene welding on low-carbon steel plate and pipe.
Course fee	£230

B122**GAS SHIELDED ARC WELDING**

This course is designed to meet the needs of craftspersons and senior apprentices in Engineering and allied industries in metal arc gas shielded and Tungsten arc gas shielded welding to Asme IX, EN287 and BS4872 tests on stainless steel, low-carbon steel and aluminium.

Entrance Requirements	Employed in one of the engineering or allied trades.
Duration	One evening per week (7.00pm to 10.00pm) from September to Easter.
Course of Study	Practical metal arc gas shielded welding on low-carbon steel and Tungsten arc gas shielded welding on aluminium and stainless steel.
Course fee	£230

B123**M.M.A. ADVANCED PLATE AND PIPE WELDING**

This course is designed to meet the needs of craftspersons and senior apprentices in engineering or allied trades in manual metal arc welding to Asme IX, EN287 and BS 4872 tests on low-carbon steel plate and pipe.

Entrance Requirements	Employed in one of the engineering or allied trades.
Duration	One evening per week (7.00pm to 10.00pm) from September to Easter.
Course of Study	Practical manual metal arc welding on low-carbon steel plate and pipe.
Course fee	£230

B124**PIPE FABRICATION**

This course is designed to meet the needs of craftspersons and senior apprentices in pipe fabrication and is suitable to those employed in the following areas: pipe fitting, welding, sheetmetal work, metal fabrication.

Entrance Requirements	Employed in an engineering or allied trade area.
Duration	One evening per week from 7.00pm to 10.00pm for 20 weeks, beginning September/October.
Course of Study	Theory-drawing and practical work on all types of pipe fabrications.
Course fee	£230

**B125****LIGHT GAUGE FABRICATION**

This course has been designed to meet the needs of people in the engineering and allied industries who wish to gain an understanding and appreciation of the methods of working and joining metals such as copper, low-carbon steel, aluminium and brass.

Entrance
Requirements

Employed in the engineering or allied industries.

Duration

One evening per week from 7.00pm to 10.00pm for 20 weeks, beginning September/October.

Course of Study

This course will cover repousse work, hollowing, planishing, raising, metal shrinking/stretching, decorating and double curvature work, moulding, mechanical and thermal joining processes.

Course fee

£230

B126**WELDING REPAIR AND MAINTENANCE**

This course is designed to meet the needs of persons in the areas of repair and maintenance welding for the engineering industry. The materials used will be low-carbon steel, stainless steel, aluminium, copper, brass and cast iron joined by the manual metal arc, M.I.G./M.A.G., T.I.G. and oxy-acetylene welding processes.

Entrance
Requirements

Employed in the engineering or allied industry with some knowledge and experience of welding.

Duration

One evening per week (7.00pm to 10.00pm) from September to Easter.

Course of Study

Theory of and the practical methods used to repair low-carbon steel, stainless steel, aluminium, copper, brass and cast iron materials.

Course fee

£230

**B127****ART METAL CASTING**

Objective

To introduce Artists and Sculptors and others involved in making statuary and Objets d'Art, to good design practice and the principles involved in casting in Brass, Bronze and Aluminium.

Duration

One evening per week for 8 weeks or other suitable arrangements.

Entrance
Requirements

Appropriate to those involved in Artistic Work.

Course fee

£100

B128**SHEET METAL WORK**

This course is designed to assist Craftsmen to prepare for the Senior Trade Certificate Examinations of the Department of Education or the City and Guilds of London.

Duration

One year, two evenings per week.

Subjects

Trade Theory & Drawing.

Entry
Requirements

Prospective students must have completed 3 years of apprenticeship and hold the Department of Education Junior Trade Certificate.

Course fee

£330

B129**SHEET METAL WORK—UPDATING OF SKILLS**

This course is designed for the Sheetmetal work crafts person who require to update their practical skills.

Duration

Ten weeks, meeting on two evenings per week, Monday and Tuesday 7.00 p.m. to 9.30 p.m.

Course
Content

The use of numerical controlled Press Brake and Modern Welding Processes as applied to the Sheet Metal Industry.

Entrance:
Requirements

Employment in the Sheet Metal Industry.

Course fee

£100

B130	<p>METAL FABRICATION</p> <p>This course is designed to assist Senior Apprentices and Craftsmen to prepare for the Senior Trade Certificate Examination of the Department of Education or City and Guilds of London.</p>
Duration	One year, two evenings per week.
Subjects	Trade Theory & Drawing.
Entry Requirements:	Prospective apprentices must have completed 3 years of apprenticeship and have passed the Junior Trade Certificate.
Course fee	£330

B131	<p>PLUMBING</p> <p>This course is designed to assist Senior Apprentices and Craftsmen to prepare for the Senior Trade Certificate Examination of the Department of Education.</p>
Duration	One year, two evenings per week.
Subjects	Trade Theory & Drawing.
Entry Requirements	Prospective apprentices must have completed 3 years of apprenticeship and have passed the Junior Trade Certificate.
Course fee	£330

B132	<p>CRAFT TECHNICIAN CERTIFICATE COURSE IN PLUMBING</p> <p>This three-year course of study has been designed to prepare craftspersons as craft technicians in Plumbing. Attendance is on three evenings per week (or alternatively on one day and one evening per week).</p>
Course of Study	<p>Stage I: Hot and Cold Water Systems, Gas Installations, Sanitation and Drainage, Mathematics, Science, Drawing and Design.</p> <p>Stage II: Mathematics, Science, Mechanics of Fluids, Heating Technology, Drawing and Design.</p> <p>Stage III: Origination and Management Techniques, Estimating and Quantities, Heating Technology, Welding Technology, Design Project.</p>

Entry Requirements	Prospective students must have completed at least three years of an appropriate craft apprenticeship and have successfully completed the Senior Stage of the Department of Education Craft Certificate Examination (Written and Practical) with endorsement where such is offered.
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At the end of each stage, students will be required to be successful in a College examination in each subject before proceeding to the next stage. A DIT Craft Technician Certificate will be awarded to students who pass the final (Stage III) examination in all subjects. Students who are successful in the final examination may apply for corporate membership of the Institute of Plumbing and are also eligible for the Engineering Technician status of the Engineering Council.

Course fee	£330
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B133	<p>TENDERING AND ESTIMATING PRACTICE (MECHANICAL SERVICES INDUSTRY)</p> <p>One year - one evening per week.</p>
Duration	
Subjects	Tendering Procedures, Tender Documents, Contracts, Take-Off Practice, Pricing Folder, Labour Rates, Bill of Quantities, Material and Labour Schedules. Presentation of Tender and Estimating Project .
Entry Requirements	Department of Education Senior Trade Certificate.
Course fee	£230

B134	<p>HEATING AND PLUMBING MERCHANTS / PROVIDERS COURSE</p> <p>One year - one evening per week.</p>
Duration	
Subjects	Hot and Cold Water Systems, Heating Systems, Drainage and Sanitation.
Entry Requirements	Employed in the Industry.
Course fee	£230

**B135****DOMESTIC HEATING ENGINEERS COURSE**

This course is intended for persons employed in the heating industry and will provide a broad technical education and understanding of the principles and techniques involved in heat engineering. The course is run in conjunction with the Institute of Domestic Heating Engineers. Applications for admission to the course should in the first instance be addressed to:

*The Institute of Domestic Heating Engineers
15 Summerfield, Old Bawn, Tallaght, Dublin 24.*

Entry Requirements	Department of Education Senior Trade Certificate in Plumbing and be employed in the industry.
Duration	Two years, two evenings per week, Monday and Tuesday
Subjects	Heating Technology; Gas Technology; Management Techniques; Tendering and Estimating; Mechanical Services Drafting.
Course Fee	£330

B136**DOMESTIC GAS INSTALLATIONS (IRISH STANDARD 813)**

This course will provide the participants with a detailed knowledge of the requirements of the new Irish Standard 813 which covers all types of Domestic Gas Installations

Entry Requirements	Employed in the Gas, Mechanical or Building Services Industry.
Duration	One year, one evening per week from September to Easter.
Subjects	Materials and L.P.G. Gas, Meter, Storage Installation requirements, permitted location of applications, Heating, Cooking, Water Heating. Hot Water Heating Systems. Electrical Considerations, Ventilation requirements, Commissioning.
Course fee	£230

B137**EFFICIENT ENERGY PRACTICE**

This course has been specifically designed to provide a means of meeting the demand for efficient operation and control of heating and energy using existing processes and installations. It will provide an understanding of several different skills and disciplines required in the control and management of energy.



Entry Requirements

Suitable employment in Engineering, Construction or Building Management.

Duration

One year, one evening per week - September to Easter.

Course fee

£230

B138**ENGINEERING QUALITY ASSURANCE**

This course provides a background for those who have responsibility for setting specifications for performance in manufacture or service industry and techniques for measuring their achievement.

Objective

The City & Guilds of London Institute Parts I & II, 743 Quality Control Certificate. The Part I examination may be taken in December and the Part II in June

Duration

One year.

Entrance Qualifications

Craft, Technician, Engineering and Management personnel with suitable background and experience.

Course fee

£230

B139**QUALITY ASSURANCE MANAGEMENT**

This programme provides further study for those who have completed the City & Guilds 7430 Parts 1 and 2 Certificate and defines the role of management in the supervision of Quality Assurance Principles and Techniques. Particular emphasis will be placed on the Irish market while generally considering new legislation and E.U. directives. Certification is by the Irish Quality Association.

Entry Requirement:

City & Guilds Certificate 7430 Parts 1 and 2. Applications will also be considered from candidates employed in the area with relevant experience.

Course Duration

One evening per week for the full session.

Course Content

Quality Legislation and EU Directives; Financial Consideration of Quality; Quality Documentation; Quality Assurance; Practical Problem Solving Techniques and Applications; Case Studies and Site Visits.

Course fee

£230

**B140****ENGINEERING SYSTEMS MAINTENANCE**

This course is designed for apprentices, craftspersons and craft based technicians who wish to acquire a competence in General Maintenance Technology and Practice.

Objective

City & Guilds of London Institute Parts II and III 2140 Certificate in Engineering Systems Maintenance.

Candidates who successfully complete each element will be issued with a record of achievement and will qualify for the Part II Certificate when they have passed the two core subjects and any three of the optional subjects for Part II. Two Part III optional subjects are required for the Part III Advanced Certificate.

Core Subjects

General Maintenance Technology, Maintenance Organisation.

Optional Subjects

Pneumatics, Hydraulics, Mechanical Power Transmissions, Electrical Systems, Machine Tool Systems Part 3, Plant Installation and Commissioning Part 3.

Duration

Each subject will involve attendance of between 1.5 and 3 hours per week.

Course fee

£230

B142**ENGINEERING CRAFT STUDIES-INSPECTION (METROLOGY)****Objective**

The City & Guilds of London Institute Mechanical Engineering Craft Studies Certificate 2050, Part III. This course combines both the theoretical and practical aspects, making use of a well equipped metrology laboratory.

Course Duration

One year, one evening per week.

Entry Requirements

Craft apprenticeship, technician or other engineering qualifications.

Course fee

£230

**B143-B145****COMPUTER-AIDED ENGINEERING**

A series of short courses for those requiring an understanding of new engineering technologies and their implications - City and Guilds 2302 scheme.

B143

Basic NC/CNC

B144

Basic CAD/CAM.

B145

Basic Robotics

Course Duration

10 weeks—one evening per week or an alternate daytime arrangement, depending on demand.

Entry Requirements

Applicants should have a suitable engineering background as craftsmen, technicians or other technical positions.

Course fee

£100

B146**NC/CNC MACHINE SETTING AND OPERATION**

This is a one-year course to prepare mechanical engineering craftspersons for the City & Guilds 2303 Level III Certificate. It provides an introduction to CNC machines and their programming.

Course fee

£230

B147**NC/CNC—PART PROGRAMMING**

The City & Guilds of London Institute 2303 Level III Certificate.

Course Content

Simple operating principles of Numerical Control, Data Storage and Transmission Media, the NC Machine-Axis, and the purpose of a machine datum, the principle of co-ordinate dimensioning, pre Planning for Part Programming, part Programming.

Course Duration

One year (one evening per week).

Entry Requirements

City and Guilds of London Institute 2303 Certificate (See B141D)

Course fee

£230

B148**NC/CNC—ADVANCED PART PROGRAMMING**

The City & Guilds of London Institute 2304 Level IV Certificate.

Course Content

Planning programming procedures, the efficient use of canned cycles, sub-routines and other facilities on a number of CNC machines, develop programmes using CAD/CAM Packages, consider the implications of Computer-Aided Manufacturing in Industry, produce working parts on CNC Milling, Turning and Wire Eroding Machines.

Course Duration

One year (one evening per week).

Entrance Requirements

City & Guilds of London Institute 2303 Level III Certificate.

Course fee

£230

B150**FLIGHT OPERATION OFFICER (DISPATCHER COURSE)**

This course provides instruction for flight operations officers in all operational aspects related to the preparation for commercial flights and the ground monitoring of all flights from a safety and efficiency viewpoint from the ground. It includes flight planning, aircraft loading, flight watch and operational considerations such as weight and runway limitations for the aircraft performance, weather, and ATC procedures.

The course follows the guidelines of ICAO standardised course 201

Duration

One year, two evenings per week.

Entrance Requirements

A general knowledge of aviation appropriate to personnel employed in airlines or associated operations.

Course fee

£330

B151**PRODUCTION PLANNING COURSE (I.A.T.A.)**

This course provides instruction for personnel employed in the Planning Departments of the Aeronautical Industry. The course covers Aircraft Organisation and Practice, and Aircraft Operational and Maintenance Planning.

Entrance Requirements

Personnel employed in Planning Departments in the Industry or holders of Part II Examinations of the City & Guilds of London Institute Certificate Course (258) Part II

Duration

1 year, 2 evenings per week.

Course fee

£330

B152**AERONAUTICAL MAINTENANCE ENGINEERS' LICENCES**

B710

'A' LICENCE—F50 P&W 125 ENGINE

B711

'A' LICENCE—B737

B712

'A' LICENCE—B747

B713

'A' LICENCE—B727

B714

'C' LICENCE—P & W JT8D

B715

'C' LICENCE—P & W JT9D

B716

'X' LICENCE—INSTRUMENTS

B717

'X' LICENCE—ELECTRICAL

B718

'X' LICENCE—RADIO

B719

'X' LICENCE—RADIO (RADAR ENDORSEMENT)

B720

SHORTS 360 AIRCRAFT AND PT6 ENGINE

B721

'X' LICENCES—AVIONICS

B722

B 737 CFM 56-3 ENGINE.

B723

B737—200/300 DIFFERENCES COURSE.

B724

B737—400/500 DIFFERENCES COURSE.

B725

B767—300 AIR FRAME

The above courses provide instruction for Aircraft Maintenance Engineers wishing to take the appropriate licence examination of the Irish Aviation Authority. The courses are of one year duration requiring attendance on one evening per week.

Entrance Requirements

Basic Aeronautical Engineering Certificate in appropriate Category.

Duration

One year, one evening per week.

Course fee

£230

**B153****JET ENGINE OVERHAUL PROCEDURES**

This course provides instruction in Jet Engine design and overhaul procedures.

Entrance
Requirements

Employment in the Industry.

Duration

1 year, 1 evening per week

Course fee

£230

B154**AERONAUTICAL ENGINEERING CRAFT STUDIES****Stage 1**

This is a one year course requiring attendance for two evenings (6 hours) weekly per session. The course is designed to prepare students for Part I of the City and Guilds of London Institute Examinations in Aeronautical Engineering Industry

Entrance
Requirements

Junior Certificate and be employed in the Aeronautical Engineering Industry.

Stage 2 (Mechanical)

This one year course is designed to prepare students for Part II of the City & Guilds of London Examinations in Aeronautical Engineering Craft Studies (Course No. 2080). Classes are held on three evenings per week from October to May

Entrance
Requirements

Part II City & Guilds Aero Engineering Craft Studies or Aeronautical Engineering Occupational Competences.

Course fee

First Year	£330
Second Year	£330

**B155**

B155

B156

B157

B158

B159

B160

B161

B162

BASIC AERONAUTICAL ENGINEERING CERTIFICATES

AIRFRAMES PRESSURISED (B.A.E.C.2)

PISTON ENGINES (B.A.E.C.3)

TURBO—PROP & TURBO—JET ENGINES (B.A.E.C.4)

HELICOPTERS (LESS ENGINES) (B.A.E.C.5)

ELECTRICAL (B.A.E.C.6)

RADIO (B.A.E.C.7)

INSTRUMENTS (B.A.E.C.8)

INSPECTION & REPAIR OF METAL AND COMPOSITES AIRCRAFT STRUCTURES BAEC 10

The above courses are of one year's duration, requiring attendance for two evenings (6 hours weekly per session). The courses are designed to prepare students for the Basic Aeronautical Engineering Certificate examinations of the Irish Aviation Authority

Entrance
Requirements

Not less than two years employment in the Aeronautical Engineering Industry.

Course fee

£230

B163**PRIVATE AIRCRAFT PILOT'S LICENCE**

This course provides instruction in Meteorology, Navigation, Air Legislation, Theory of Flight and Aircraft Limitations, for personnel wishing to take the Irish Aviation Authority Private Pilots Licence.

Duration of
Course

1 year, one evening per week

Course fee

£230

B164**PRIVATE PILOTS LICENCE (INSTRUMENT RATING)**

This course provides instruction for personnel who already hold a Private Licence and wish to take the Irish Aviation Authority Private Licence Instrument Rating.

Course Duration

1 year, 1 evening per week.

Course fee

£230

**B165**

Objective

Course Duration

Subjects

Entrance

Requirements

Course fee

MOTOR CYCLE MECHANICS

The City & Guilds of London Institute Craft Certificate 3890.

One year of 30 weeks, 2 evenings (6 hours) each week.

Motor Cycle Technology, Motor Cycle Maintenance Repair.

Employment as a motor cycle mechanic.

£330

B170

Objective

Course Duration

Entrance

Requirements

Course fee

MOTOR VEHICLE PARTS PERSONNEL

The City & Guilds of London Institute 3840, Vehicle Parts Personnel, Parts 1 and 2

Two years, 6 hours per week

Junior Certificate and employment in the motor industry

£330

B171

Aims of the Course

Entry

Requirements

Course

Content

MOTOR VEHICLE PARTS PERSONNEL-DISTANCE LEARNING

To prepare students for vehicle parts personnel 384 parts 1 and 2 certificate of the City and Guilds of London Institute.

(1) Junior Certificate

(2) Employment in the motor industry

The course comprises a series of units which are studied at home. A short test at the end of each unit must be satisfactorily completed before proceeding to the next unit.

Subjects studied include; parts service administration, stock management and control, commercial practice, parts distribution, legal aspects, customer relations and communications.

Course Fee

£230

**B172**

Objective

Course Duration

Attendance

Subjects

Entrance

Qualifications

Course fee

**MOTOR VEHICLE CRAFT STUDIES—
DIAGNOSTIC TECHNIQUES**

The City & Guilds of London Institute 3810 Part III.

One year, (3-10 week modules)

One evening (3 hours) each week.

Diagnostic Techniques (engine), Transmission Diagnostic Techniques.

Department of Education Senior Trade Certificate

£230

B173

Objective

Course Duration

Attendance

Subjects

Entrance

Qualifications

Course fee

**MOTOR VEHICLE CRAFT STUDIES-
COMPRESSED AIR SYSTEMS;
C.I. ENGINES; FUEL INJECTION EQUIPMENT**

The City & Guilds of London Institute 3810 Part III.

One year of 30 weeks. (3-10 week modules)

One evening (3 hours) each week.

Compressed Air Systems, Compression Ignition Engines, Fuel Injection Equipment.

Department of Education Senior Trade Certificate.

£230

**B174****MOTOR VEHICLE CRAFT STUDIES-
ELECTRICITY/ ELECTRONICS**

Objective	The City & Guilds of London Institute 3810 Part III.
Course Duration	One year of 30 weeks.
Attendance	One evening (3 hours) each week.
Subjects	Motor Vehicle Electricity and Motor Vehicle Electronics.
Entrance Qualifications	Department of Education Advanced Technician Certificate.
Course fee	£230

B175**AUTO-ENGINEERING TECHNICIANS**

Objective	Department of Education Advanced Motor Car Engineering Technological Certificate and the City & Guilds of London Institute Motor Vehicle Technicians Full Technological Certificate (3900), Parts II and III.
Course Duration	1 year part-time (7 hours) and 1 evening (3 hours) each week for 35 weeks.
Subjects	Motor Car Engineering, Automobile Electricity/Electronics, Heat Engines, Applied Mechanics, Garage Organisation and Management and Computer Studies.
Entrance Qualifications	Department of Education Senior Trade Certificate with endorsement subjects or Department of Education Intermediate Motor Car Engineering Technological Certificate (2 subjects) or the City & Guilds of London Institute 3900, Part 1.
Course fee	£330

**B176****AUTOMOBILE ENGINEERING UPDATING COURSES-
CONTINUING EDUCATION PROGRAMME**

Objective	Updating of trade personnel in modern developments relating to engines, transmission systems, electronics, brakes etc.
Course Duration	Two days to a few weeks—day and/or evening.
Entry Requirements	Senior Trade Certificate in Motor Engineering.
Course Fee	Dependant on length/level of course

B177**TECHNOLOGICAL CERTIFICATE
IN AUTOMOBILE ENGINEERING**

Objective	Department of Education Elementary, Intermediate and Advanced Technological Certificates in Motor Car Engineering.
Course Duration	3 years of 30 weeks each year, 3 evenings (9 hours each week).
Subjects	Motor Car Engineering, Engineering Science and Mathematics, Automobile Electricity, Engineering Laboratory, Garage Organisation and Management. (Year three only)
Entrance Requirements	Leaving Certificate or employment in the motor industry
Course fee	First and Second Year £330 Third Year £230

B178**MOTOR INDUSTRY MANAGEMENT CERTIFICATE**

	This three year course prepares students for membership examinations of the Institute of the Motor Industry.	
Subjects	Motor Industry Management, Motor Industry Law, Motor Industry Administration and Organisation, Accountancy, Computer Studies.	
Entrance Requirements	Leaving Certificate or equivalent qualification. Exemptions to stages of the course may be available to suitably qualified candidates.	
Course fee	First and Second Year £330 Third Year £230	

B179**ROAD TRANSPORT STUDIES**

This three year course prepares students for the membership examinations of the Institute of Road Transport Engineers and Certificate of Professional Competence of the Department of the Environment.

Subjects

Management Supervision and Practice, Financial and Commercial Aspects, Workshop Organisation and Administration, Legal Aspects of Motor Trade and Transport Legislation - Technical and Administrative, Transport Operational Principles, Computer Studies.

Entrance Requirements

The Leaving Certificate or equivalent qualifications. Exemptions from stages of the course may be available to suitably qualified candidates.

Course fee

First and Second Years	£230
Third Year	£330

B180**BOOK AND ARCHIVE RESTORATION**

The purpose of this one year course is to train students in the repair and presentation of books, documents, etc. It is of particular value to the staffs of hand bindaries, local record offices and those libraries concerned with the care of manuscripts and archives. Attendance is required on one evening per week.

Entrance Requirements

Entry subject to interview.

Course fee

£230

B182**PRINT FINISHING**

This one year course covers techniques and materials used in the production of books, magazines, and a wide range of miscellaneous work handled in the print finishing department. Stress is laid on hand and machine operations, e.g., wire stitching, sewing and folding, machine and hand feeding, gathering, glueing and mounting.

Entrance Requirements

Employment in a relevant sector of the industry.

Course fee

£230

B183**INTRODUCTION TO PRINTING TECHNOLOGY**

A one year course to prepare students for the Introduction to Printing Technology P.E.I./B.P.I.F. examinations to be accepted as a candidate for the following:-

- Estimating examination of the British Printing Industries Federation.
- Printing Office Procedure examination of the British Printing Industries Federation.

Entrance Requirements

Leaving Certificate or equivalent or acceptable industrial experience.

Course fee

£230

B184**COST ACCOUNTANCY FOR PRINTERS**

A one year course designed to prepare students for the examinations of the British Printing Industries Federation.

Entrance Qualifications

Royal Society of Arts Certificate in Accounting and Office Procedure, or equivalent or acceptable industrial experience.

Course fee

£230

**B185****ESTIMATING FOR PRINTERS**

A one year course designed to prepare students for the examination of the British Printing Industries Federation.

Entrance
Qualifications

Leaving Certificate or equivalent qualification or Introduction to Printing Technology Examination of the British Printing Industries Federation or acceptable industrial experience.

Course fee

£230

B186**PAPER TECHNOLOGY**

A two-year course for personnel employed in Printing, Paper and Packaging Industries. Students are prepared for the examination of the Institute of Paper.

Entrance
Qualifications

Leaving Certificate or equivalent or acceptable industrial experience.

Course fee

£230

B187**DESIGN FOR PRINT**

This is a two year course to give students knowledge/skills in the following subject areas: Basic Design, Copy Preparation, Typographic Design, Printing Processes, Book and Magazine Layout, Advertising Design, Packaging Design, Graphic Design.

Entrance
Qualifications

Leaving Certificate or Department of Education Senior Certificate in a graphic arts subject or equivalent qualification or acceptable industrial experience.

Course fee

First Year	£330
Second Year	£330

**B188****INTRODUCTION TO MANAGEMENT (GRAPHIC INDUSTRIES)**

Course Duration

A one year course to prepare students for the City & Guilds of London Institute Certificate in Introduction to Management (Graphic Industries).

Entrance
Qualifications

Leaving Certificate or equivalent or acceptable industrial experience.

Course fee

£230

B189

Aims of
the course

PACKAGING PRINCIPLES AND PRACTICE

Students are prepared for the Institute of Packaging Diploma examination.

Entry
Requirements

Leaving Certificate or equivalent and/or acceptable industrial experience.

Duration of
Course

One year.

Course Content

Packaging materials, quality, machinery, distribution, marketing, printing, commercial aspects, legislation, environment, product types.

Course Fee

£230

B191**BOOKBINDING AND PRINT FINISHING RETRAINING**

This one year evening course for personnel employed in the Printing Industry provides instruction in the latest techniques, and covers the whole range of materials and technology used in print finishing processes.

Course fee

£230

B192**LITHOGRAPHY AND PHOTO-LITHOGRAPHY RETRAINING**

This course for personnel employed in the Printing Industry provides instruction in the latest techniques of lithographic plate making and press operation.

Course Duration

Ten weeks, six hours per week.

Course fee

£230

**B193****ADVANCED LITHOGRAPHIC PRINTING AND PLATEMAKING**

Aims of course	To train students in advanced Lithographic Press Operation.
Entrance Requirements	Full apprenticeship or employment in the industry.
Course Duration	Ten weeks, six hours per week
Course content	Lithographic Press Operations, setting of feeders, delivery, inking and damping units. Single and multiple units. Platemaking techniques: Impositions and planning. Inks and ink mixing. Process colour, Perfecting and C.P.C.
Course fee	£230

B197**DESK TOP PUBLISHING**

This course is for personnel requiring training in Desk Top Publishing. Design is an important feature of the course.

Course Duration	Ten weeks, six hours per week.
Course fee	£330

B198**ADVANCED DESK TOP PUBLISHING COURSE**

Aim of Course To train students in desk top publishing systems using Adobe Illustrator and Photoshop Software packages.

Entrance Qualifications Practical experience in industry or completion of other desk top publishing course.

Duration of Course Ten weeks, six hours per week.

Course fee £330

B199**SCREEN PRINTING**

This is a one year course which covers the following topics: Screen Preparation, Printing Techniques, (manual/semi-auto) Single and Multi Colour Work, Materials and Substrates.

Entrance Requirements Employment in the industry.

Course fee £230

**DIT ACADEMIC CALENDAR - SESSION 1995/96****1995**

September

Friday 1st
Monday 4th

Monday 11th

Monday 18th
Monday 25th

December

Saturday 9th
Friday 15th

1996January
March

Monday 8th
Friday 29th

April

Monday 15th

May

Friday 3rd
Monday 13th

Term 1

Commencement of Session
Commencement of part-time courses in Music and Drama
Interviews and enrolments for part-time and evening courses commence
Wholetime courses commence
Part-time day and evening courses commence

Term 2

Classes resume
Final class meetings of second term

Term 3

Classes resume
Final class meetings of third term
Summer examinations commence

- Classes are not scheduled on public holidays during the session (viz. 30 October; 18 March; 6 May; 3 June)
- Classes are not scheduled from Monday December 18th to Friday January 5th inclusive or from Monday April 1st to Friday April 13th inclusive.

The information contained in this booklet is intended as a guide for persons seeking admission to the Institute and is not intended as an element of a contract between the Institute and the student or his/her employer or sponsor. The Institute reserves the right to change or modify any of the courses or the information without prior notice. Applicants are advised to check the details of any course before enrolling for it.



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